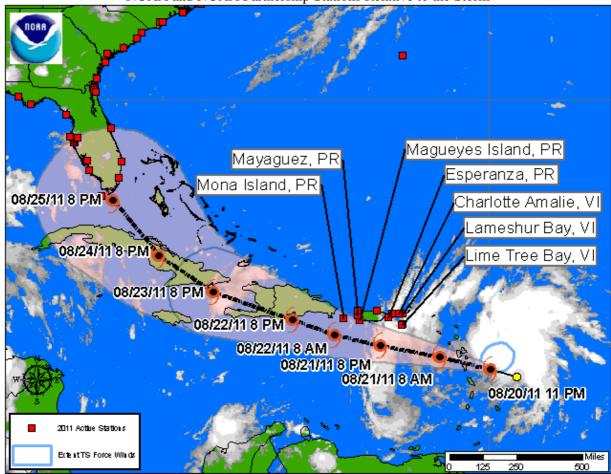


NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 08/21/2011 00:00 AST, water levels in the U.S. Virgin Islands and Puerto Rico are at or near predicted. Winds are steady in the region, with gusts upto 20 knots at Lime Tree Bay, VI. Barometric pressure is steady across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to <u>Mean Lower Low Water</u> are:

Lime Tree Bay, VI Next predicted high tides are 0.76 ft (0.23 m) at 08/21/2011 19:55 AST and 0.82 ft (0.25 m) at 08/22/2011 20:20 AST.

Lameshur Bay, VI Next predicted high tides are 0.43 ft (0.13 m) at 08/21/2011 01:07 AST and 0.73 ft (0.22 m) at 08/21/2011 16:49 AST.

Charlotte Amalie, VI Next predicted high tides are 0.81 ft (0.25 m) at 08/21/2011 17:25 AST and 0.87 ft (0.27 m) at 08/22/2011 18:18 AST.

Esperanza, PR Next predicted high tides are 0.63 ft (0.19 m) at 08/21/2011 18:27 AST and 0.70 ft (0.21 m) at 08/22/2011 19:12 AST.

Magueyes Island, PR Next predicted high tides are 0.76 ft (0.23 m) at 08/21/2011 19:48 AST and 0.82 ft (0.25 m) at 08/22/2011 20:14 AST.

Mayaguez, PR Next predicted high tides are 0.59 ft (0.18 m) at 08/21/2011 02:14 AST and 0.79 ft (0.24 m) at 08/21/2011 15:26 AST.

Mona Island, PR Next predicted high tides are 0.80 ft (0.24 m) at 08/21/2011 20:40 AST and 0.85 ft (0.26 m) at 08/22/2011 21:23 AST.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For information on Highest Astronomical Tide (HAT), NAVD88 and other datums, please see <u>Tidal Datums</u>. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

Analyst:CMF

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM IRENE ADVISORY NUMBER 2 1100 PM AST SAT AUG 20 2011

...IRENE APPROACHING THE LEEWARD ISLANDS...

WATCHES AND WARNINGS

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A TROPICAL STORM WARNING IS IN EFFECT FOR...

* PUERTO RICO...U.S. VIRGIN ISLANDS...VIEQUES AND CULEBRA

A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA WITHIN 36 HOURS.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES ...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE.

DISCUSSION AND 48-HOUR OUTLOOK

AT 1100 PM AST THE CENTER OF TROPICAL STORM IRENE WAS LOCATED ABOUT 95 MI E OF DOMINICA OR ABOUT 120 MI SE OF GUADELOUPE. IRENE IS MOVING TOWARD THE WEST NEAR 22 MPH AND A MOTION TOWARD WEST-NORTHWEST AT A SLOWER RATE OF SPEED IS EXPECTED DURING THE NEXT 48 HOURS. ON THE FORECAST TRACK...IRENE WILL PASS THROUGH THE LEEWARD ISLANDS EARLY SUNDAY AND MOVE INTO THE NORTHEASTERN

CARIBBEAN SEA LATER ON SUNDAY. IRENE COULD APPROACH THE DOMINICAN REPUBLIC LATE MONDAY.

MAXIMUM SUSTAINED WINDS REMAIN NEAR 50 MPH WITH HIGHER GUSTS. SOME STRENGTHENING IS FORECAST DURING THE NEXT 48 HOURS AND IRENE COULD BECOME A HURRICANE ON MONDAY.

TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 120 MILES MAINLY TO THE NORTH AND EAST OF THE CENTER.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 1006 MB.

HAZARDS AFFECTING LAND

WIND...TROPICAL STORM CONDITIONS ARE EXPECTED TO BEGIN SUNDAY AFTERNOON IN THE VIRGIN ISLANDS AND PUERTO RICO.

RAINFALL...IRENE IS EXPECTED TO PRODUCE TOTAL RAINFALL ACCUMULATIONS OF 4 TO 7 INCHES IN PUERTO RICO AND THE VIRGIN ISLANDS...WITH ISOLATED MAXIMUM AMOUNTS OF UP TO 10 INCHES. THESE RAINS COULD CAUSE LIFE-THREATENING FLASH FLOODS AND MUD SLIDES IN AREAS OF STEEP TERRAIN.

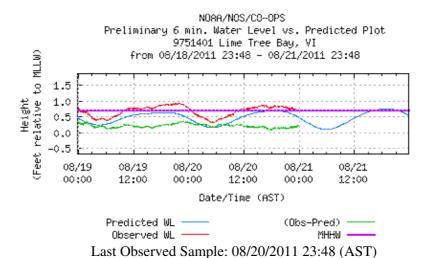
STORM SURGE...A STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 1 TO 3 FEET ABOVE NORMAL TIDE LEVELS ALONG THE IMMEDIATE COAST IN THE WARNING AREA. NEAR THE COAST...THE SURGE WILL BE ACCOMPANIED BY LARGE AND DANGEROUS WAVES.

FORECASTER BLAKE/BRENNAN

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

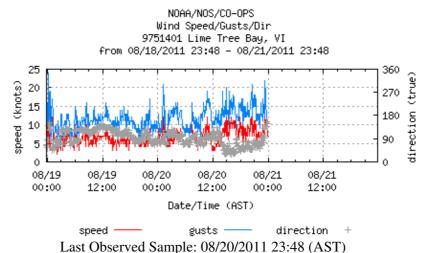
Jump to: <u>Lime Tree Bay - Water Level</u>, <u>Lime Tree Bay - Winds</u>, <u>Lime Tree Bay - Barometric</u>, <u>Lime Tree Bay - Air/Water Temp</u>, <u>Lameshur Bay</u>, <u>St. John - Barometric</u>, <u>Lameshur Bay</u>, <u>St. John - Air/Water Temp</u>, <u>Charlotte Amalie - Water Level</u>, <u>Charlotte Amalie - Barometric</u>, <u>Charlotte Amalie - Air/Water Temp</u>, <u>Magueyes Island - Water Level</u>, <u>Magueyes Island - Winds</u>, <u>Magueyes Island - Barometric</u>, <u>Mayaguez - Winds</u>, <u>Mayaguez - Winds</u>, <u>Mayaguez - Winds</u>, <u>Mayaguez - Water Level</u>, <u>Mayaguez - Winds</u>, <u>Mayaguez - Barometric</u>, <u>Mayaguez - Air/Water Temp</u>, <u>Mona Island - Water Level</u>,

Lime Tree Bay, VI - Return to List



Relative to MLLW: Observed: 0.72 ft. Predicted: 0.49 ft. Residual: 0.23 ft. Historical Maximum Water Level: Nov 17 1999, 1.88 ft. above MHHW

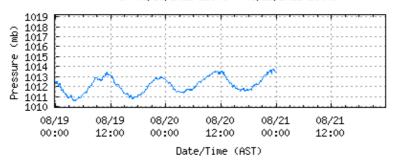
Lime Tree Bay, VI - Return to List



Wind Speed: 7 knots Gusts: 10 knots Direction: 150° T

Lime Tree Bay, VI - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 9751401 Lime Tree Bay, VI from 08/18/2011 23:48 - 08/21/2011 23:48



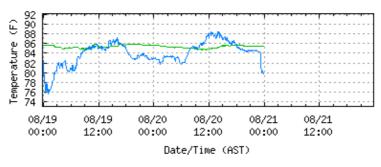
barometric pressure ——

Last Observed Sample: 08/20/2011 23:48 (AST)

Barometric Pressure: 1013.4 mb

Lime Tree Bay, VI - Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 9751401 Lime Tree Bay, VI from 08/18/2011 23:48 - 08/21/2011 23:48

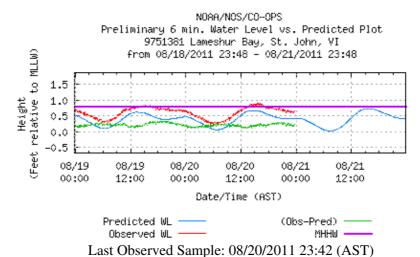


water temp. —— air temp ——

Last Observed Sample: 08/20/2011 23:48 (AST)

Water Temperature: 85.4° F Air Temperature: 79.7° F

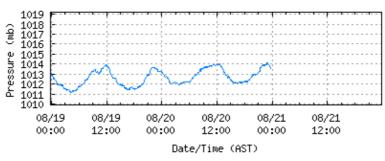
Lameshur Bay, St. John, VI - Return to List



Relative to MLLW: Observed: 0.67 ft. Predicted: 0.43 ft. Residual: 0.24 ft. Historical Maximum Water Level: Aug 30 2010, 0.9 ft. above MHHW

Lameshur Bay, St. John, VI - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 9751381 Lameshur Bay, St. John, VI from 08/18/2011 23:48 - 08/21/2011 23:48

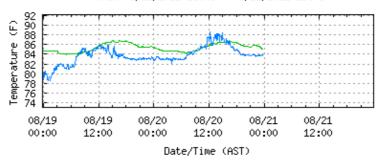


barometric pressure —— Last Observed Sample: 08/20/2011 23:42 (AST)

Barometric Pressure: 1013.5 mb

Lameshur Bay, St. John, VI - Return to List

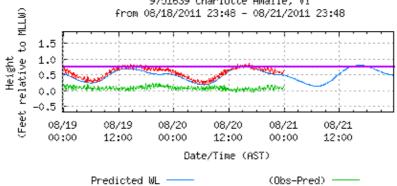
NOAA/NOS/CO-OPS Air/Water Temperature Plot 9751381 Lameshur Bay, St. John, VI from 08/18/2011 23:48 - 08/21/2011 23:48



water temp. — air temp — Last Observed Sample: 08/20/2011 23:42 (AST) Water Temperature: 85.1° F Air Temperature: 83.8° F

Charlotte Amalie, VI - Return to List

NOAA/NOS/CO-OPS
Preliminary 6 min. Water Level vs. Predicted Plot
9751639 Charlotte Amalie, VI
from 08/18/2011 23:48 - 08/21/2011 23:48



Observed WL

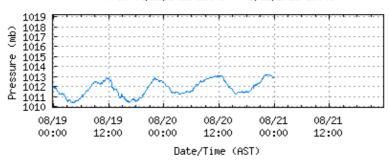
Last Observed Sample: 08/20/2011 23:48 (AST)

MHHW

Relative to MLLW: Observed: 0.63 ft. Predicted: 0.49 ft. Residual: 0.14 ft. Historical Maximum Water Level: Sep 16 1995, 2.93 ft. above MHHW

Charlotte Amalie, VI - Return to List

NOAA/NOS/CO-OPS
Barometric Pressure Plot
9751639 Charlotte Amalie, VI
from 08/18/2011 23:48 - 08/21/2011 23:48



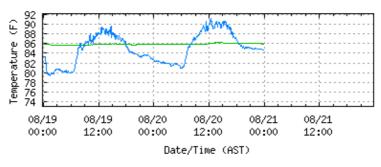
barometric pressure ———

Last Observed Sample: 08/20/2011 23:48 (AST)

Barometric Pressure: 1012.9 mb

Charlotte Amalie, VI - Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 9751639 Charlotte Amalie, VI from 08/18/2011 23:48 - 08/21/2011 23:48

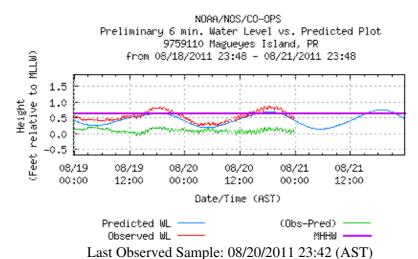


water temp. —— air temp ——

Last Observed Sample: 08/20/2011 23:48 (AST)

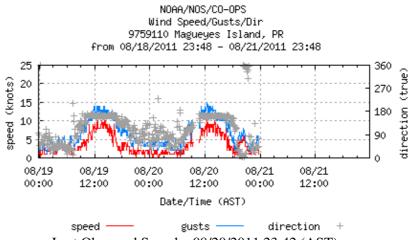
Water Temperature: 85.9° F Air Temperature: 84.6° F

Magueyes Island, PR - Return to List



Relative to MLLW: Observed: 0.49 ft. Predicted: 0.44 ft. Residual: 0.05 ft. Historical Maximum Water Level: Sep 22 1998, 1.6 ft. above MHHW

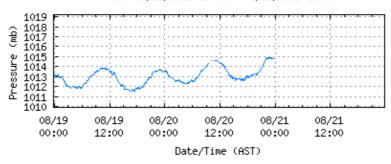
Magueyes Island, PR - Return to List



Last Observed Sample: 08/20/2011 23:42 (AST) Wind Speed: 1 knots Gusts: 3 knots Direction: 75° T

Magueyes Island, PR - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 9759110 Magueyes Island, PR from 08/18/2011 23:48 - 08/21/2011 23:48



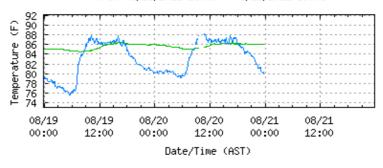
barometric pressure ——

Last Observed Sample: 08/20/2011 23:42 (AST)

Barometric Pressure: 1014.8 mb

Magueyes Island, PR - Return to List

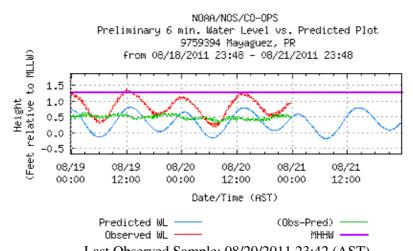
NOAA/NOS/CO-OPS Air/Water Temperature Plot 9759110 Magueyes Island, PR from 08/18/2011 23:48 - 08/21/2011 23:48



water temp. — air temp — Last Observed Sample: 08/20/2011 23:42 (AST)

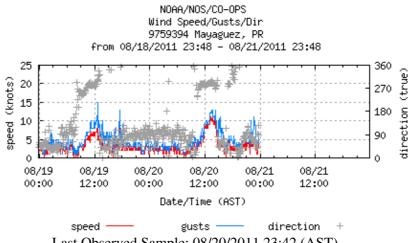
Water Temperature: 86.0° F Air Temperature: 80.2° F

Mayaguez, PR - Return to List



Last Observed Sample: 08/20/2011 23:42 (AST)
Relative to MLLW: Observed: 0.92 ft. Predicted: 0.47 ft. Residual: 0.45 ft.
Historical Maximum Water Level: , 0 ft. above MHHW

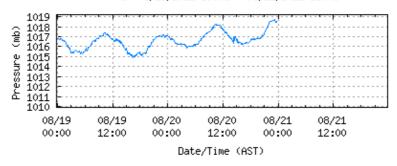
Mayaguez, PR - Return to List



Last Observed Sample: 08/20/2011 23:42 (AST) Wind Speed: 3 knots Gusts: 4 knots Direction: 88° T

Mayaguez, PR - Return to List

NOAA/NOS/CO-OPS Barometric Pressure Plot 9759394 Mayaguez, PR from 08/18/2011 23:48 - 08/21/2011 23:48

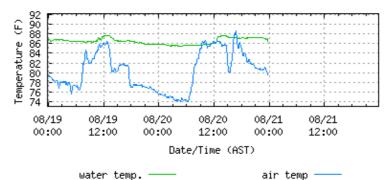


barometric pressure —— Last Observed Sample: 08/20/2011 23:42 (AST)

Barometric Pressure: 1018.4 mb

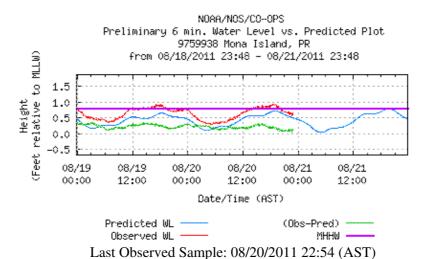
Mayaguez, PR - Return to List

NOAA/NOS/CO-OPS Air/Water Temperature Plot 9759394 Mayaguez, PR from 08/18/2011 23:48 - 08/21/2011 23:48



Last Observed Sample: 08/20/2011 23:42 (AST) Water Temperature: 86.5° F Air Temperature: 79.5° F

Mona Island, PR - Return to List



Relative to MLLW: Observed: 0.61 ft. Predicted: 0.50 ft. Residual: 0.11 ft.

Historical Maximum Water Level: Dec 23 2010, 1.26 ft. above MHHW

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce